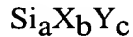


n representing an integer 3 or more, m representing an integer of n, $2n-2$, $2n$, or $2n+2$, and X representing a hydrogen atom and/or a halogen atom; and

silicon compound represented by



X representing a hydrogen atom and/or a halogen atom, Y representing a boron atom or a phosphorus atom, a representing an integer of 3 or more, b representing an integer of a to $2a+c+2$, and c representing an integer of 1 to a.--

REMARKS

Claims 1-23 are pending. By this Amendment, claims 1, 4, 13-15 and 22 are amended, and claim 23 is added. Reconsideration based on the above-amendments and following remarks is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

I. THE CLAIMS SATISFY THE REQUIREMENTS OF 35 U.S.C. §112, SECOND PARAGRAPH

The Office Action rejects claims 4, 13 and 22 under 35 U.S.C. §112, second paragraph, as indefinite. Claims 4, 13 and 22 are amended to obviate the rejection according to the Examiner's suggestions. Withdrawal of the rejection under 35 U.S.C. §112, second paragraph is respectfully requested.

II. THE CLAIMS DEFINE ALLOWABLE SUBJECT MATTER

The Office Action rejects claims 1-5 and 14 under 35 U.S.C. §102(a) as unpatentable over U.S. Patent No. 5,989,945 to Yudasaka et al.; claims 1-5 and 14 under 35 U.S.C. §102(b) as unpatentable over WO97/43689 to Yudasaka et al.; claims 15 and 18 under 35 U.S.C. §102(b) as unpatentable over U.S. Patent No. 3,379,512 to Margrave et al.; claims 6, 7, 9, 15, 16 and 18 under 35 U.S.C. §103(a) as unpatentable over Yudasaka '945 in view of Margrave; claims 8, 10-12, 17 and 19-21 under 35 U.S.C. §103(a) as unpatentable over

Yudasaka '945 in view of JP 06-191821 to Kotaro et al.; claims 13 and 22 under 35 U.S.C. §103(a) as unpatentable over Yudasaka '945 in view of U.S. Patent No. 5,667,572 to Taniguchi et al.; claims 6, 7, 9, 15, 16 and 18 under 35 U.S.C. §103(a) as unpatentable over Yudasaka '689 in view of Margrave; claims 8, 10-12, 17 and 19-21 under 35 U.S.C. §103(a) as unpatentable over Yudasaka '689 in view of Kotaro; and claims 13 and 22 under 35 U.S.C. §103(a) as unpatentable over Yudasaka '689 in view of Tanaguchi. These rejections are respectfully traversed.

With respect to claims 1, 14 and 15, none of the applied art discloses a method for forming a silicon film including, "the silicon compound having at least one cyclic structure," as recited in claim 1; or an ink-jet ink composition for forming a silicon film including, "the silicon compound having at least one cyclic structure," as recited in claims 14 and 15.

Instead, Yudasaka '945 discloses a silicon film formed by coating and annealing of a coating solution using monosilane (SiH_4) and disilane (Si_2H_6) or disilane and trisilane (Si_3H_8). Yudasaka '689 has the same disclosure as Yudasaka '945 as indicated by the Office Action. Additionally, Margrave discloses compounds containing Si_3BF_9 , $\text{Si}_4\text{BF}_{11}$ and $\text{Si}_5\text{BF}_{13}$. Applicants have found no indication in the applied art of the silicon compound having at least one cyclic structure, as recited in independent claims 1, 4 and 15.

With regard to claim 16, it is respectfully asserted that none of the applied art teaches an ink-jet ink composition for forming a silicon film including both silicon compounds Si_nX_m and $\text{Si}_a\text{X}_b\text{Y}_c$.

Instead, Yudasaka '945 and Yudasaka '689 disclose a silicon film containing monosilane (SiH_4) and disilane (Si_2H_6) or disilane and trisilane (Si_3H_8). The Office Action asserts that Margrave makes up for this deficiency. However, Margrave discloses compounds including Si_3BF_9 , $\text{Si}_4\text{BF}_{11}$ and $\text{Si}_5\text{BF}_{13}$. Accordingly, none of the applied art teach or suggest each feature of claim 16.

For the same reasons as discussed above with respect to claim 16, Applicants respectfully assert that new claim 23 is allowable.

Applicants respectfully assert that the rejections under 35 U.S.C. §§102 and 103 should be withdrawn because the applied art whether taken singly or combined, do not teach or suggest each feature of independent claims 1, 14-16 and 23. As pointed on in MPEP §2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)." Similarly, MPEP §2143.03 instructs that "[t]o establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 409 F.2d 981, 180 USPQ 580 (CCPA 1974)."

For at least these reasons, it is respectfully submitted that independent claims 1, 14-16 and 23 are distinguishable over the applied art. The remainder of the claims that depend from independent claims 1, 14-16 and 23 are likewise distinguishable over the applied art for at least the reasons discussed above, as well as for the additional features they recite.

III. CONCLUSION

For at least these reasons, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-23 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Jeffery M. Lillywhite
Registration No. P-53,220

JAO:JMLvgp

Attachments:

Appendix
Petition for Extension of Time
Amendment Transmittal

Date: January 23, 2003

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

**DEPOSIT ACCOUNT USE
AUTHORIZATION**

Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461